

**AMENDMENTS TO THE CLAIMS:**

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

**LISTING OF CLAIMS:**

1. (Currently amended) A perfluoride compound processing apparatus, comprising:

a silicon component removing apparatus for removing a silicon component from an exhaust gas containing a perfluoride compound and said silicon component,

a heating apparatus for heating said exhaust gas containing said perfluoride compound, to which at least one of water and steam is added after said exhaust gas has been exhausted from said silicon component removing apparatus,

a catalyst layer filled with a catalyst for decomposing said perfluoride compound contained in said exhaust gas exhausted from said heating apparatus, and

a cooling apparatus, located below said catalyst layer, for cooling said exhaust gas exhausted from said catalyst layer;

also comprising:

a cartridge having said catalyst layer formed inside; and

a casing wherein said cartridge is removably attached,

wherein said heating apparatus, said casing, and said cooling apparatus are formed in an integral body structure in the above order; and

further comprising a reactor which comprises said cartridge, an internal tube wherein said cartridge is contained, and said casing, and wherein said casing of said reactor is shared with a casing of said heating apparatus.

2. (Original) A perfluoride compound processing apparatus as claimed in claim 1, which further comprises:

a temperature detector for detecting a temperature of said exhaust gas exhausted from said catalyst layer, and

a controller for controlling said heating apparatus based on the temperature detected by the temperature detector.

3. (Original) A perfluoride compound processing apparatus as claimed in claim 1, which further comprises:

an acidic gas removing apparatus for removing acidic gas contained in said exhaust gas exhausted from said cooling apparatus.

4. (Original) A perfluoride compound processing apparatus as claimed in claim 1, wherein said silicon component removing apparatus comprises a spray apparatus for spraying water.

5. (Original) A perfluoride compound processing apparatus as claimed in claim 4, wherein said cooling apparatus comprises a spray apparatus for spraying cooling water for cooling said exhaust gas.

6. (Original) A perfluoride compound processing apparatus as claimed in claim 5, wherein:

said silicon component removing apparatus comprises a first silicon component removing apparatus, and a second silicon component removing

apparatus to which said exhaust gas from said first silicon component removing apparatus is supplied,

a first spray apparatus for spraying water provided inside said second silicon component removing apparatus, and

a second spray apparatus for spraying both water sprayed from said first spray apparatus and water sprayed from said spray apparatus of said cooling apparatus.

7. (Original) A perfluoride compound processing apparatus as claimed in claim 1, wherein a check valve, for preventing said exhaust gas from flowing back into said silicon component removing apparatus from said heating apparatus, is provided in a path conducting said exhaust gas from said silicon component removing apparatus to said heating apparatus.

8. and 9. (Cancelled).

10. (Original) A perfluoride compound processing apparatus as claimed in claim 1, wherein a heat exchanger for exchanging heat between the exhaust gas exhausted from said catalyst layer and water, and for generating said steam, is provided between said catalyst layer and said cooling apparatus.

11. and 12. (Cancelled).

13. (Original) A perfluoride compound processing apparatus as claimed in claim 4, wherein:

an exhaust gas inlet portion for supplying said exhaust gas containing a perfluoride compound and a silicon component to said silicon component removing apparatus is extended into said silicon component removing apparatus, and

a gas outlet opening of said exhaust gas inlet portion is provided at a position lower than said spray apparatus of said silicon component removing apparatus, and said gas outlet opening is oriented downwards in said silicon component removing apparatus.

14. (Original) A perfluoride compound processing apparatus as claimed in claim 13, wherein a diffusion portion for diffusing sprayed water from said spray apparatus of said silicon component removing apparatus is provided inside said silicon component removing apparatus between said spray apparatus of said silicon component removing apparatus and said exhaust gas inlet portion.

15. – 24. (Cancelled).